Gigabit Switch

GS-2124C: 24-Port GbE L2 Managed Switch with 2 SFP Dual Media

Key Features

- **Standard Compliance**
  - ---IEEE 802.3x flow control capability
  - ---IEEE 802.1q VLAN
  - ---IEEE 802.1p QoS
- **RoHS Compliance**
- **Performance**

  Switching Capacity:
  - ---24 Gigabit Ethernet ports with non-blocking wire speed performance
  - ---8 K MAC addresses
  - ---400KB on-chip frame buffer
  - ---Supports Jumbo frame, up to 9K
  - ---Broadcast/Multicast Storm Suppression
  - ---Port Mirroring

  VLAN
  - ---Port-base VLAN
  - ---IEEE802.1q tag-base VLAN, up to 256 active VLANs
  - ---Q-in-Q is an efficient method for enabling Subscriber Aggregation

  VSM(Virtual Stacking Management)
  - ---Up to 16 switches can be managed via Single IP
  - ----Virtual stacking, no extra stacking hardware is required
  - ----Distributed stacking, no physical central wiring closet is needed

  QoS
  - ---Supports Layer 4 TCP/UDP port and ToS classification
  - ---Supports 802.1p QoS with two level priority queue
  - ---Supports priority in a Q-in-Q tag

  Bandwidth Control
  - ---Supports bandwidth rating per port ingress and egress rate limit 1000 Mbps with 1Mbps increment
- **Protocol**

  LACP
  - ---Port trunking with 8 trunking groups
  - ---up to 12 ports for each group

  GVRP/GARP
  - ---802.1q with GVRP/ GARP

  Multicasting
  - ---Supports IGMP snooping including active and passive mode

Benefits

- **2 dual media ports for flexible fiber connection**
  Port 23, 24 dual media ports are provided for flexible fiber connection. You can select to install optional SFP transceiver modules in these cages for short, medium or long distance fiber backbone attachment. Use of the SFP will disable their corresponding built-in 10/100/1000Base-T connections.
- **QoS supports layer 4 classification**
  The switch supports not only Layer 2 802.1p Priority Queue control, but also supports programmable higher layer classification and prioritization to enable enhanced Quality of Service (QoS) support for real time applications based on information taken from Layer 2 to Layer 4, such as VoIP.
- **Port Mirroring helps supervisor monitoring network**
  Port mirroring copies traffic from a specific port to a target port. This mechanism helps track network errors or abnormal packet transmission without interrupting the flow of data.
- **Q-in-Q VLAN for performance & security**
  The VLAN feature in the switch offers the benefits of both security and performance. VLAN is used to isolate traffic between different users and thus provides better security. Limiting the broadcast traffic to within the same VLAN broadcast domain also enhances performance. Q-in-Q, the use of double VLAN tags is an efficient method for enabling Subscriber Aggregation. This is very useful in the MAN.
- **802.3ad Port Trunk for bandwidth aggregation**
  The Gigabit ports can be combined together to create a multi-link load-sharing trunk. Up to 12 Gigabit ports can be set up per trunk for bandwidth up to 24Gbps, all traffic is aggregated based on MAC addresses, thus balancing the traffic load. The switch supports up to 8 trunking groups. Port trunks are useful for switch-to-switch cascading, providing very high full-duplex speeds.
- **802.1x Access Control improves network security**
  802.1x features enable user authentication for each network access attempt. Port security features allow you to limit the number of MAC addresses per port in order to control the number of stations for each port. Static MAC addresses can be defined for each port to ensure only registered machines are allowed to access. By enabling both of these features, you can establish an access mechanism based on user and machine identities, as well as control the number of access stations.
- **802.1D compatible & 802.1w rapid spanning tree**
  For mission critical environments with multiple switches supporting STP, you can configure the switches with a redundant backup bridge path, so transmission and reception of packets can be guaranteed in event of any switch failed on the network.
- **Broadcast/Multicast Storm control**
  To limit too many broadcast/multicast flooding in the network, broadcast/ multicast storm control is used to restrict excess traffic. Threshold values are available to control the rate limit for each port. Packets are discarded if the count exceeds the configured upper threshold.

Gigabit Switch

- **STP/RSTP**
  - ---802.1d/1w/1s STP
- **Network Security**
  - ---802.1x access control
  - ---Management Access Policy Control (ACL)
- **SNMPv1,v2c Network Management**
- **RFC 1213 MIB (MIB-II)**
  - ---Interface MIB
  - ---Address Translation MIB
  - ---IP MIB
  - ---ICMP MIB
  - ---TCP MIB
  - ---UDP MIB
  - ---SNMP MIB
- **RFC 1757 RMON MIB**
  - ---Statistics Group 1
  - ---History Group 2
  - ---Alarm Group 3
  - ---Event Group 9
- **RFC 1493 Bridge MIB**
- **RFC 1643 Ethernet MIB**
- **Enterprise MIB**

Overview

The GS-2124 is an L2 managed Gigabit switch that supports SNMP, Web UI and CLI management interface. It is equipped with 24 Gigabit TP ports and 2 of which are dual media ports that accommodate optional 10/100/1000Base-T or SFP modules. In addition, the switch implements the QoS (Quality of Service), Mac Filtering Policy, Port Mirror, VLAN and full L2 protocol. It is suitable for workgroups or WAN edge application.

Technical Specifications

• LED Description:

	LED	Color	Function
Global	POWER	Green	-Lit when +5V power is coming up
Global	CPU	Green	-Blinks when CPU is active
Port 1-24	LINK/ACT	Green	-Lit when connection with remote device is good -Blinks when any traffic is present
Port 1-24	10/100/ 1000Mbps	Green /Amber	-Lit Green when TP link on 1000Mbps speed -Lit Amber when TP link on 100Mbps speed -Off when 10Mbps or no link occurs
Port 23,24	SFP	Green	-Lit when SFP connection with remote device is good -Blinks when any traffic is present

• Diagnostic LEDs:

System LED :	Power
10/100/1000M TP Port Per Port LED:	Link/Act, 10/100/1000Mbps
Gigabit SFP Module LED:	SFP

• Network Interface:

Configuration	Connector	Port
10/100/1000Mbps TP Jack (RJ-45)	TP(RJ-45)	1 to 24
1000Mbps SFP Fiber Module	SFP	23, 24

• Cable and Maximum Length:

TP	Cat. 5 UTP cable, up to 100m
1000Base-SX SC M-M	Up to 220/275/500/550m, which depends on Multi-Mode Fiber type
1000Base-LX SC S-M	Single-Mode Fiber, up to 10/30/50Km
1000Base-LX WDM SC S-M	Single-Mode Single Fiber, Bidi 20Km

• Hardware Specifications:

Feature	Detailed Description
Voltage	100~240 VAC
Frequency	50~60 Hz
Consumption	30W
Ambient Temperature	0 to 40℃
Humidity	5% to 90%
Dimensions	44(H) x 442(W) x 209(D) mm
Weight	2.86kg
Safety	UL Complies with FCC Part 15 Class A & CE Mark

Packing Information

Carton Dimensions (mm)	pcs/Carton	N.W (KG)	G.W (KG)
530x512x345	5	19	20

Ordering Information

GS-2124C:
24-Port GbE L2 Managed Switch with 2 SFP Dual Media

Note:
We recommend the SFP transceiver from the following vendors:
1. Ruby Tech Corporation
2. Agilient Technologies
3. AVAGO Technologies
4. Finisar Corporation

Ruby Tech Corp.
2F, No.7, Lane 50, Nan Kang Road, Sec.3, Taipei, Taiwan
TEL:886-2-2785-3961 FAX:886-2-2786-3012
http://**www.rubytech.com.tw**
E-mail : rubytech@mail.rubytech.com.tw

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